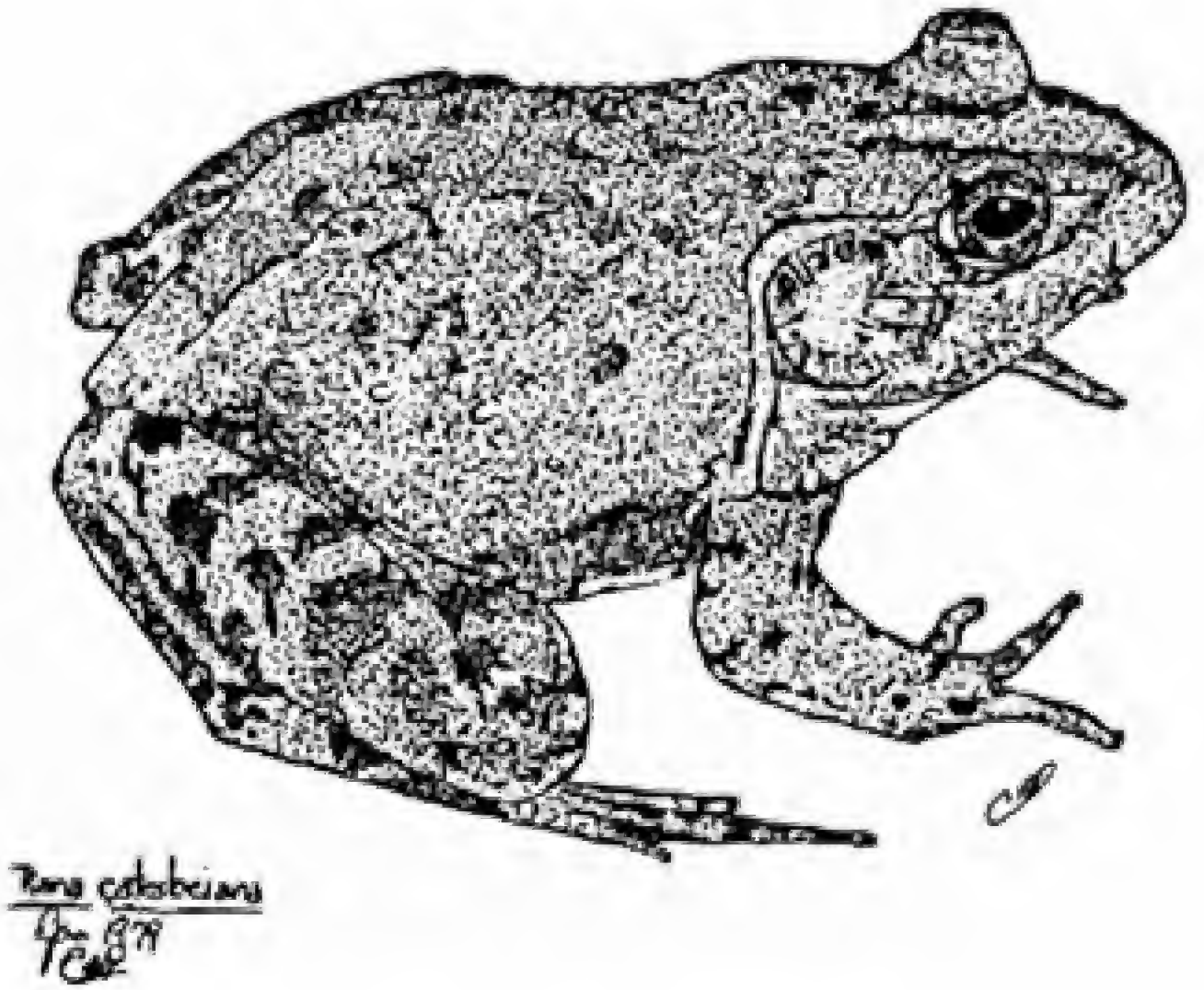
CATESBEIANA



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BULLETIN INFORMATION

Catesbeiana is published twice a year by the Virginia Herpetological Society. Membership is open to all individuals interested in the study of amphibians and reptiles and includes a subscription to *Catesbeiana*, two newsletters, and admission to all meetings. Annual dues for regular membership are $15.00 (see application form on last page for other membership categories). Payments received after September 1 of any given year will apply to membership for the following calendar year. Dues are payable to: Dr. Paul Sattler, VHS Secretary/Treasurer, Department of Biology, Liberty University, 1971 University Blvd., Lynchburg, VA 24502.

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The principal function of *Catesbeiana* is to publish observations and original research about Virginia herpetology. Rarely will articles be reprinted in *Catesbeiana* after they have been published elsewhere. All correspondence relative to the suitability of manuscripts or other editorial matters should be directed to Dr. Steven M. Roble, Editor, *Catesbeiana*, Virginia Department of Conservation and Recreation, Division of Natural Heritage, 217 Governor Street, Richmond, VA 23219.

Major Papers

Manuscripts submitted for publication should be typewritten (double-spaced) on good quality 8½ by 11 inch paper, with adequate margins. Consult the style of articles in this issue for additional information, including the appropriate format for literature citations. The metric system should be used for reporting all types of measurement data. Computer diskettes (Word or WordPerfect format) are desired for longer papers. Submissions concerning the herpetofauna of selected areas, such as a park, city or county, should be prepared in article rather than field note format. Articles will be refereed by the editor and one or more qualified reviewers. All changes must be approved by the author before publication; therefore, manuscripts must be received by the editor before **March 1** and **September 1** to be considered for publication in the spring and fall issue, respectively, of *Catesbeiana*. Reprints of articles are not available, but authors may reprint their own articles to meet professional needs.

(Editorial policy continued on inside back cover)

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Jefferson Salamander (*Ambystoma jeffersonianum*) reared from a larva collected at Douthat State Park during the 2003 Virginia BioBlitz survey.

Photo by Jason D. Gibson

2003 BioBlitz Survey of Douthat State Park: Herpetological Results

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Introduction

The second annual Virginia BioBlitz survey was conducted at Douthat State Park. The purpose of this 30-hour survey was to document the local plant and animal diversity of the park. The park is located 5 km north of Clifton Forge and is contained within the counties of Alleghany and Bath (Fig. 1). The park is comprised of 1,818 hectares (4,493 acres) of land and a 20-hectare (50 acre) lake (VDCR, 2003). In the 1930s, the Douthat Land Company (a group of Virginia businessmen) donated 777 hectares (1,920 acres) of land for the initial state park project. The rest of the park was purchased by the Commonwealth of Virginia in 1933. In the late 1930s and early 1940s, the Civilian Conservation Corps built many structures on the property, including a dam, beach, restaurant, and many cabins (VDCR, 2003). Most of these structures still stand today. Douthat is located in the Ridge and Valley physiographic province and is part of the James River watershed. The highest elevation in the park is 914 meters (3,000 feet) above sea level. There are a variety of habitats found in the confines of the park, including vernal pools, perennial and ephemeral streams, a lake and spillway, upland hardwood forest, and shaley slopes. More than 64 kilometers (40 miles) of hiking trails allow for easy access to many collecting sites.

Study Sites

A diversity of habitat types was selected as study sites for this survey. Habitats sampled included the lake, vernal pools, streams and riparian woodlands, upland forest, shaley mountain slopes, campgrounds, hiking trails, and roads. A total of thirteen sites was sampled during the survey (Fig. 2).

Materials and Methods

The official BioBlitz survey was conducted on 17-18 May 2003. Heavy to moderate rains fell throughout most of the survey period. Animals were captured

Figure 1. Map showing the location of Douthat State Park.

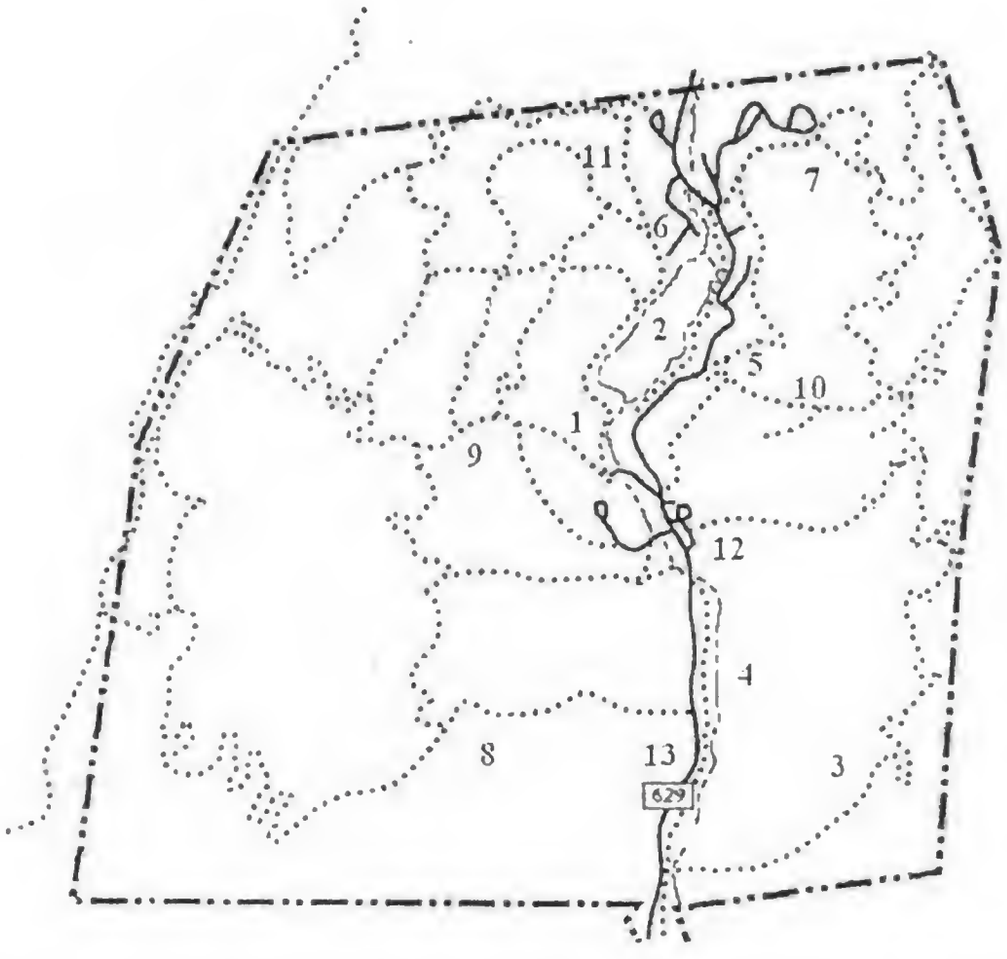

Figure 2. Sites sampled for amphibians and reptiles during the 2003 BioBlitz.

Site 1: Spillway of dam
Site 2: Douthat Lake and margins of lake
Site 3: Brushy Hollow Trail
Site 4: Margins of Wilson Creek
Site 5: Big Lick Hollow
Site 6: Lakeside campground
Site 7: Ross Camp and Hollow Trail
Site 8: Stony Run Trail
Site 9: Blue Suck Falls Trail
Site 10: Buck Hollow Trail
Site 11: Backway Hollow
Site 12: Park headquarters
Site 13: Route 629

using diverse herpetological sampling techniques. Terrestrial animals were found by overturning logs and rocks, searching through leaf litter, peeling tree bark, road cruising at night, and by direct visual observation. Vocalizations of calling male anurans were identified to species. Aquatic reptiles and amphibians were collected by dipnetting, setting baited hoop traps, and by overturning rocks and cobble in streams. In some cases, tadpoles and salamander larvae were taken back to the laboratory and reared for positive species identification. Identifications were agreed upon by at least two members of the survey group. For each animal found, information on collection site and microhabitat was recorded.

Results

A total of 28 species of amphibians and reptiles was found during this survey, including 18 amphibians (13 salamanders, 5 anurans) and 10 reptiles (2 turtles, 2 lizards, 6 snakes). Two of these species (*Lampropeltis triangulum* and *Sceloporus undulatus hyacinthinus*) were only found on 16 May, prior to the 30-hour BioBlitz survey period. Five species (*Ambystoma jeffersonianum*, *A. maculatum*, *A. opacum*, *Agkistrodon controtrix mokasen*, and *Sceloporus undulatus hyacinthinus*) were not recorded for Bath County by Mitchell (1994) or Mitchell and Reay (1999). However, both Tobey (1985) and Linzey and Clifford (1995) reported the Northern Copperhead, and Tobey also reported an unvouchered Northern Fence Lizard record for Bath County. *Ambystoma jeffersonianum* is the only new county record from the BioBlitz that was vouchered (digital photograph #74 deposited in the Virginia Herpetological Society archives).

Annotated Checklist

(* = only found prior to start of 30-hour BioBlitz survey period)

Amphibians

1. *Ambystoma maculatum* (Spotted Salamander) – [Sites 4, 5, 8]

Many egg masses and larvae were found in vernal pools within Douthat State Park. Site 8 consisted of a high elevation vernal pool that provided breeding habitat for three *Ambystoma* species, as well as *Rana sylvatica*.

2. *Ambystoma opacum* (Marbled Salamander) – [Sites 8, 10]

Marbled Salamander larvae were plentiful in two vernal pools. Several larvae were collected and reared in the laboratory to metamorphosis. One adult *A. opacum* was captured beneath a log.

3. *Ambystoma jeffersonianum* (Jefferson Salamander) – [Site 8]

Only larvae of this species were found during this survey. Many were dipnetted at site 8, several of which were raised in the laboratory to metamorphosis. Hoffman (1945, 1985a, b) did not find this species in Alleghany County despite many years of field work, but Stevenson et al. (1996) recorded it at four sites in the county.

4. *Desmognathus fuscus* (Northern Dusky Salamander) – [Site 4]

Nine adult Northern Dusky Salamanders, including a gravid female, were found under cover objects along the wooded margins of Wilson Creek.

5. *Desmognathus monticola* (Seal Salamander) – [Sites 4, 6]

Three juvenile and three adult Seal Salamanders were along several wooded ravines and stream margins in the park.

6. *Plethodon cinereus* (Red-backed Salamander) – [Sites 4, 7]

Despite 30 hours of surveying, only two Red-backed Salamanders were captured. One adult was recorded under a cover object along Ross Camp Hollow Trail, and one adult was found under bark along Wilson Creek below the dam spillway.

7. *Plethodon cylindraceus* (White-spotted Slimy Salamander) [Sites 4, 7, 11]
8. *Plethodon glutinosus* (Slimy Salamander)

Douthat State Park lies very near the eastern edge of the range of *P. glutinosus* and the western edge of the range of *P. cylindraceus* (Mitchell and Reay, 1999). It is possible that both species occur within the park, and that individuals of each were collected during the survey. However, because of the potential for error in the identification of these species, and the possibility for intergrades between them, we cannot be certain without genetic analysis which of the two species was actually recorded. Therefore, we combined all records for "slimy salamanders." Four adults were found under logs along Wilson Creek south of Brushy Hollow Trail, and several others were found along Back Way Hollow and Ross Camp Hollow trails.

9. *Pseudotriton ruber* (Red Salamander) – [Sites 4, 8, 11, 13]

Eight *P. ruber* were found during the survey. One adult was discovered crawling on leaf litter during a diurnal rain shower. Another adult and two juveniles were

caught under logs. Four adults were found on Route 629 during nocturnal surveys.

10. *Gyrinophilus porphyriticus* (Spring Salamander) – [Sites 9, 13]

Nocturnal road cruising along Route 629 yielded one adult Spring Salamander. Another adult was observed at Blue Suck Hollow.

11. *Eurycea cirrigera* (Southern Two-lined Salamander) – [Sites 4, 6, 11, 13]

Southern Two-lined Salamanders were found in wooded ravines, along the riparian margin of Wilson Creek, and on the road at night. Ten adults and one larva were found during this survey.

12. *Eurycea longicauda* (Long-tailed Salamander) – [Site 4]

One adult Long-tailed Salamander was found at the base of a shale cliff, and a subadult was discovered under a log.

13. *Notophthalmus viridescens* (Red-spotted Newt) – [Sites 2, 4, 7, 8]

Adult newts were numerous at all of the sites listed above, especially in the shallow waters of the reservoir. Many adults were observed in amplexus. Three efts were observed during the surveys.

14. *Bufo americanus* (American Toad) – [Sites 9, 13]

American Toads were only found at two sites. Four adult females were captured during nocturnal road surveys.

15. *Pseudacris crucifer* (Spring Peeper) – [Sites 1, 4, 6, 8]

During the survey time period, many male Spring Peepers were heard calling around the park, however, only three adults were captured. Amplexus was observed on several occasions.

16. *Rana clamitans* (Green Frog) – [Site 6]

Despite the availability of suitable habitat at several sites, only one Green Frog tadpole was dipnetted.

17. *Rana catesbeiana* (American Bullfrog) – [Site 1]

One large adult female bullfrog was dipnetted in a vernal pool near the dam spillway. No tadpoles were observed or calling males heard.

18. *Rana sylvatica* (Wood Frog) – [Sites 1, 5, 8]

Twelve tadpoles were dipnetted from vernal pools at the above sites. No adults were observed.

Reptiles

19. *Chelydra serpentina* (Snapping Turtle) – [Site 1]

Several *C. serpentina* were caught with baited hoop traps in the spillway below the dam. One juvenile specimen was noted in a small pool below the spillway.

20. *Terrapene carolina carolina* (Eastern Box Turtle) – [Site 10]

A single box turtle was reported in a seep adjacent to Buck Hollow Trail.

21. **Sceloporus undulatus hyacinthinus* (Northern Fence Lizard) – [Site 2]

One adult was observed on the day before the BioBlitz on the rocks used to build part of the dam. Weather conditions during the BioBlitz survey period were not conducive to lizard activity, and this species was not seen during the survey period. Tobey (1985) previously reported this species from Douthat State Park (unvouchered record noted in Mitchell, 1994).

22. *Eumeces fasciatus* (Five-lined Skink) - [Site 4]

Two specimens were found along Wilson Creek south of Brushy Hollow Trail.

23. *Carphophis amoenus amoenus* (Eastern Wormsnake) – [Sites 4, 7]

Two adults were discovered under logs, one near a shaley ridge, and the other along the wooded margin of Wilson Creek. Another was found dead along Ross Camp Hollow Trail. One adult was also observed on the day before the BioBlitz.

24. *Agkistrodon contortrix mokasen* (Northern Copperhead)

One subadult was observed along a trail approximately 500 meters north of upper Brushy Gap in a remote section of the park.

25. **Lampropeltis triangulum* (Milk Snake) - [Site 13]

One Milk Snake was found on Route 629 on the night before the official start of the BioBlitz.

26. *Nerodia sipedon sipedon* (Northern Watersnake) – [Site 1]

One dead *N. sipedon* was found at the bottom of the dam spillway.

27. *Diadophis punctatus* (Ring-necked Snake) – [Sites 6, 8]

One Ring-necked Snake was found dead on the road leading to the entrance of the lakeside campground. Another was reported from the lower Stony Run area.

28. *Thamnophis sirtalis sirtalis* (Eastern Gartersnake) – [Site 10]

One juvenile was captured beneath a large rock along Buck Hollow Trail.

Discussion

The purpose of the annual Virginia BioBlitz survey is to draw attention to the biodiversity that inhabits the state. The 2003 BioBlitz revealed that our knowledge of the herpetofauna in Bath County is inadequate. The 30-hour survey, which was cold and rainy, yielded four new county records. If weather conditions had been optimal, possibly a dozen or more county records could have been found.

For example, Mitchell and Reay (1999) reported twelve species of salamanders (but no *Ambystoma*) for Bath County, whereas the BioBlitz survey produced thirteen species (including three *Ambystoma*). Of eight species of anurans recorded in Mitchell and Reay (1999), five were found during the BioBlitz. Eighteen species of reptiles (three turtles, two lizards, and thirteen snakes) are documented for Bath County in Mitchell (1994), Mitchell and Reay (1999), and Tobey (1985). The BioBlitz survey recorded two species of turtles, two species of lizards, and four species of snakes. The virtual lack of snake observations was likely due to the cold and rainy weather.

No county records were documented in the Alleghany County portion of the state park. Hoffman (1945, 1985a, b, 1986, 1987) gives a very detailed account of the herpetofaunal diversity and biogeography of Alleghany County that he studied over many years. When viewing the number of species that he reported for this county (54 total species, 10 anurans, 16 salamanders, 4 turtles, 6 lizards, and 18 snakes) caution must be used when making conclusions about the biodiversity of

an area using a 30-hour survey. To fully document the diversity of reptiles and amphibians, future organizers of surveys should focus on visiting a site through the seasons, increasing the amount of survey time, and increasing the use of other survey methods (drift fence arrays, pitfall traps, and coverboards). This might be facilitated by the Virginia Herpetological Society organizing summer and fall surveys at sites visited by the annual BioBlitz.

Acknowledgments

We thank the reviewers for their time and effort with earlier versions of this manuscript. We thank the participants and organizers of BioBlitz for their hard work and effort. Special thanks to the staff of Douthat State Park for allowing BioBlitz to be held at their park, and for their assistance with the logistics and operations.

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Stevenson, D. J., M. Hayslett, and C. S. Hobson. 1996. Field notes: *Ambystoma jeffersonianum*. Catesbeiana 16(1): 16-20.

Tobey, F.J. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey. Virginia Herpetological Society, Purcellville, VA. 114 pp.

Virginia Department of Conservation and Recreation. 2003. Virginia State Parks (Douthat State Park). http://www.dcr.state.va.us/parks/douthat.htm#History

Errata

The paper by Jason D. Gibson entitled "Herpetofaunal survey of Sherando Lake Recreation Area, Loves Run Complex, Green Pond, and Humpback Rocks" that appeared in *Catesbeiana* 22: 3-13 (2002), has the following correction due to a recently published article by Richard Highton (Highton, R. 2004. A new species of woodland salamander of the *Plethodon cinereus* group from the Blue Ridge Mountains of Virginia. Jeffersoniana 14: 1-22).

Twelve salamanders found during the survey, one under a rock in the talus slope adjacent to Lake Sherando and 11 found along the margins of Green Pond, were identified as *P. cinereus* (Red-backed Salamander). Due to the unusual morphology and color of one individual found around Lake Sherando, we identified it as the erythristic phase of the Red-backed Salamander. Using molecular data, Highton (op. cit.) has classified *P. cinereus*-like salamanders in this area of Lake Sherando as a new species, *Plethodon sherando* (Big Levels Salamander). In Highton's publication, Green Pond is identified as a region where *P. sherando* is found but not *P. cinereus*. This changes the results for amphibians from 13 species to 14 species and the salamander results from five to six species.

Summary of Virginia Geographic Distribution Records and Natural History Notes Published in *Herpetological Review* from 1991-2005

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The distribution, natural history, and conservation of the native herpetofauna of Virginia are major interests of the Virginia Herpetological Society (VHS). Arguably, the most significant project of the society to date was the compilation of thousands of geographic distribution records that culminated in the summary publication by Tobey (1985). Many members of the society, both individually and collectively (through the annual spring survey, and more recently, the Virginia BioBlitz and, starting this year, the Virginia Herp Blitz), have added numerous new distribution records during the past two decades. Most of these records have been included in the summaries prepared by Mitchell (1994) and Mitchell and Reay (1999), as well as Linzey and Clifford (1981/1995). Many new county (or city) records have been published in *Catesbeiana* during the past quarter century, although some of those reported prior to 1999 were omitted from the most recent atlas (Roble, 1999) and a few erroneous records are included in that atlas (e.g., Roble, 2004). Also, several new species that inhabit Virginia, including *Plethodon montanus* (replaces *P. jordani* as a member of our fauna), *P. sherando*, and *P. virginia*, have been described since 1999 (Highton, 1999, 2004; Highton and Peabody, 2000) and other species (*Pseudacris nigrita*) have been reported from the state for the first time (Hobson and Moriarity, 2003).

A considerable number of the records in Tobey (1985) were unsubstantiated sight (or vocal) records. Whereas the unvouchered reptile records were mapped and listed individually by Mitchell (1994), the amphibian records (sight and vocal) were omitted from Mitchell and Reay (1999). During the past decade, the VHS has strived for greater documentation of all new county and city records, requiring voucher specimens (deposited in a museum) or conclusive photographs or audio recordings (deposited in the VHS archives) before a record can be accepted for publication in *Catesbeiana*. The society's website currently includes a summary of all field notes, including new county and city records, published in *Catesbeiana* since 1993 (plus the text of field notes dating back to 1990). Furthermore, both the Tobey (1985; for errors and corrections, see Mitchell and Pague, 1987) and Mitchell and Reay (1999) atlases are now posted on the VHS website. One of the primary purposes of making the atlases and field notes summary available on the website is to assist members of the society and general public in determining if they have discovered an individual or population of a

species that potentially represents a new state, county or city record, or a significant range extension.

Besides the atlases and *Catesbeiana*, the primary outlet for the publication of new geographic distribution records involving Virginia species is *Herpetological Review*, a publication of the international Society for the Study of Amphibians and Reptiles. Occasionally, new records also appear in the *Virginia Journal of Science* or *Banisteria* (journal of the Virginia Natural History Society), and, rarely, in various other regional (e.g., *Bulletin of the Maryland Herpetological Society*), national or international herpetological journals.

To further assist VHS members in determining if they may have discovered a new county (or city) record of a native Virginia species, I have reviewed all issues of *Herpetological Review* published between 1991 and 2005 and compiled a summary of the Virginia geographic distribution records (Table 1). I have also taken this opportunity to briefly summarize all of the natural history notes and short papers published in *Herpetological Review* during this same period that directly pertain to Virginia populations of amphibians and reptiles (Table 2).

Herpetological Review (HR) papers cited in the tables (excludes standard geographic distribution reports and natural history notes)

Blem, C. R., and L. G. Mendoza. 2002. Using masks to monitor oxygen consumption and breathing rates of snakes. HR 33: 115-117.

Coupe, B. 2001. Arboreal behavior in Timber Rattlesnakes (*Crotalus horridus*). HR 32: 83-85.

Cross, C. L., J. B. Gallegos, F. G. James, and S. Williams. 1998. A new technique for artificially incubating Loggerhead Sea Turtle eggs. HR 29: 228-229.

D'Alessandro, S., and C. H. Ernst. 1995. Additional geographical records for reptiles in Virginia. HR 26: 212-214.

Ernst, C. H., T. S. B. Akre, J. C. Wilgenbusch, T. P. Wilson, and K. Mills. 1999. Shell disease in turtles in the Rappahannock River, Virginia. HR 30: 214-215.

Gillette, J. R., and M. G. Peterson. 2001. The benefits of transparency: candling as a simple method for determining sex in Red-backed Salamanders (*Plethodon cinereus*). HR 32: 233-235.

Grace, M. S. 2003. Timing of reproductive immigration in salamanders: roles of environmental cues and endogenous biological clocks. HR 34: 17-20.

Rossi, J.V., and R. Rossi. 1993. Earthworms: a balanced diet for small snakes? HR 28: 56.

Vess, T. J., and R. N. Harris. 1997. Artificial brooding of salamander eggs. HR 28: 80.

Table 1. Summary of Virginia geographic distribution records published in *Herpetological Review* during 1991-2005.

Year	Vol./page(s)	Author(s)	Species	County/City
1991	22: 62	Schwaner and Anderson	*Ambystoma maculatum*	Henry
1991	22: 64	Schwaner and Anderson	*Pseudacris f. feriarum*	Henry
1991	22: 64	Schwaner and Anderson	*Rana sylvatica*	Henry
1991	22: 68	Schwaner and Anderson	*Opheodrys aestivus*	Henry
1992	23: 91	Martin, Mitchell, and Hoggard	*Crotalus horridus*	Prince William
1993	24: 156-157	Buhlmann, Savits[z]ky, Savits[z]ky, and Mitchell	*Regina rigida*	New Kent[1]
1995	26: 41	Roble and Hobson	*Hemidactylium scutatum*	Scott
1995	26: 150-151	Roble	*Siren i. intermedia*	Caroline
1995	26: 212-214	D'Alessandro and Ernst	various[2]	various[2]
1996	27: 28	Buhlmann and Hobson	*Ambystoma t. tigrinum*	Isle of Wight
1997	28: 49	Mitchell and Musick	*Trachemys s. scripta*	Gloucester
1998	29: 115	Petzing and Phillips	*Regina septemvittata*	Wythe
2000	31: 111	McCoy, Schwab, and Savitzky	*Deirochelys r. reticularia*	Isle of Wight
2001	32: 191-192	Savitzky and Mitchell	**Graptemys pseudogeographica kohnii*	Newport News (introduced)
2002	33: 150-151	Savitzky, Savitzky, Belcher, and Ewers	**Ramphotyphlops braminus*	Newport News[3] (introduced)
2003	34: 160 [also 34: 255]	Hobson and Roble	*Ambystoma opacum*	Scott
2003	34: 259-260	Hobson and Moriarty	*Pseudacris nigrita*	York[3], Prince George
2003	34: 379	Akre and Hansknecht	*Eurycea l. longicauda*	Fairfax
2003	34: 387	Mitchell	*Crotalus horridus*	Hanover
2004	35: 78	Mitchell	*Hyla cinerea*	Goochland
2005	36: 198	Moosman, Moosman, and Pillow	*Ambystoma talpoideum*	Campbell[4]

[1] Rediscovery of historic population
[2] Records were summarized in *Catesbeiana* 18: 14-16
[3] First documented Virginia record
[4] New population but not a county record
* Species is not native to Virginia

Table 2. Summary of Virginia-related Natural History Notes and short papers published in *Herpetological Review* from 1991-2005.

Year	Volume/page(s)	Author(s)	Species	Nature of observation/report
1992	23(2): 60	Schwab	*Ophisaurus ventralis*	Reproduction (clutch and egg size)
1993	24(2): 56	Rossi and Rossi	*Virginia valeriae*	Litter size and captive diet (earthworms)
1994	25(1): 29	Fauth and Welter	*Nerodia sipedon*	Fatality (entangled in plastic netting)
1994	25(1): 30	Shively and Mitchell	*Thamnophis s sirtalis*	Albinism
1994	25(2): 64	Mitchell and de Sa	*Terrapene c carolina*	Reproduction (gravid female in October)
1996	27(3): 135	Fauth, Buchanan, Wise, Welter, and Komoroski	*Cryptobranchus a. alleganiensis*	Coloration (red)
1996	27(3): 144-145	Martin	*Crotalus horridus*	Reproductive phenology
1996	27(4): 195	Fenster and Fenster	*Plethodon cinereus*	Predation (by American Robin)
1996	27(4): 202-203	Mitchell and Fieg	*Agkistrodon contortrix mokasen*	Bicephaly
1997	28(2): 80	Vess and Harris	*Hemidactylium scutatum*	Artificial brooding of eggs
1997	28(2): 82	Secki and Queral-Regil	*Gyrinophilus p. porphyriticus*	Prey (*Notophthalmus viridescens* eft)
1998	29(1): 43	Cross and Marshall	*Agkistrodon p. piscivorus*	Predation (by ghost crab)
1998	29(2): 98	Saumure and Carter	*Clemmys muhlenbergii*	Parasites
1998	29(4): 228-229	Cross, Gallegos, James, and Williams	*Caretta caretta*	Artificial incubation of eggs
1998	29(4): 229-230	Hayslett, Wilson, and Mitchell	*Plethodon hubrichti*	Albinism
1999	30(2): 104	Hansknecht, Creque, and Ernst	*Thamnophis s. sauritus*	Hibernaculum
1999	30(4): 214-215	Ernst, Akre, Wilgenbusch, Wilson, and Mills	various turtle species	Shell disease
2000	31(1): 39	Garriock	*Pseudotriton r. ruber*	Albinism
2001	32(2): 83-85	Coupe	*Crotalus horridus*	Arboreal behavior
2001	32(2): 103-104	Ernst, Creque, and Hansknecht	*Kinosternon subrubrum*	Early nesting (15 April)
2001	32(4): 233-235	Gillette and Peterson	*Plethodon cinereus*	Sexing method
2002	33(1): 55-56	Cross	*Agkistrodon p. piscivorus*	Diet

Table 2 (continued).

Year	Volume/page(s)	Author(s)	Species	Nature of observation/report
2002	33(2): 115-117	Blem and Mendoza	*Nerodia taxispilota*	Oxygen consumption
2002	33(2): 132	Bowne	*Chrysemys p. picta*	Predation (attempt by Northern Harrier)
2003	34(1): 17-20	Grace	*Ambystoma maculatum*	Breeding migration cues/triggers
2003	34(1): 44-45	Grace and Church	*Ambystoma maculatum*	Vernal migration (early January and February)
2003	34(1): 62-63	Church and Mitchell	*Coluber c. constrictor*	Winter activity
2003	34(1): 75	Creque, Ernst, and Orr	*Thamnophis s. sirtalis*	Partuition
2003	34(3): 226	Brown, Georgel, and Mitchell	*Desmognathus monticola*	Diet/prey size (large caterpillar)
2003	34(3): 242	Mitchell	*Pseudemys rubriventris*	Co-joined twins
2003	34(4): 377	Blackburn, Brown, and Mitchell	*Nerodia s. sipedon*	Diet (*Gyrinophilus porphyriticus* larva)
2004	35(1): 56	Brown	*Terrapene c. carolina*	Postmortem involuntary response
2004	35(1): 56-57	Boucher and Ernst	*Terrapene c. carolina*	Injuries
2004	35(1): 61-62	Klenzendorf, Lee, Vaughan, and Duncan	*Crotalus horridus*	Defense and black bear death
2004	35(2): 168	Blackburn, Brown, and Mitchell	*Eumeces laticeps*	Parasites
2004	35(3): 265	Williams	*Glyptemys muhlenbergii*	Diet (Japanese beetle, blueberries)
2004	35(4): 366	Mitchell, Lanham, Kangas, Germaine, and Brown	*Plethodon cinereus*	Anophthalmia (one-eyed specimens)
2005	36(2): 158	Mitchell and Brown	*Eurycea bislineata*	Larval microhabitat
2005	36(2): 158	Mitchell and Brown	*Eurycea bislineata*	Larval size
2005	36(2): 183-184	Mitchell and Georgel	*Sceloporus undulatus*	Kyphosis and scoliosis
2005	36(2): 184	Townsend, Wiltshire, and Akin	*Scincella lateralis*	Arboreal behavior
2005	36(2): 193-194	Brown and Mitchell	*Elaphe alleghaniensis*	Foraging behavior (chicken eggs)
2005	36(2): 194	Mitchell	*Elaphe alleghaniensis*	Diet (Pileated Woodpecker)
2005	36(3): 294	Gibson and Merkle	*Ambystoma maculatum*	Reproduction
2005	36(3): 296	Orr and Ernst	*Plethodon cinereus*	Early nesting (7 April)

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FIELD NOTES

***Ambystoma opacum* (Marbled Salamander).** VA: Pulaski Co., town of Pulaski, Cox Hollow Road. 28 January and 7 February 2006. Joshua B. Palmer and Richard E. Palmer.

On 28 January 2006 around 1530 h (air temperature 56 F [13 C]), Richard Palmer and I observed >100 *Ambystoma opacum* larvae in one of several vernal pools present in a wooded area near Cox Hollow Road. The larvae (14 collected) were small (total length ca. 2.1 cm) and had only developed the front limbs. Diving beetles (Dytiscidae) and small, unidentified insect larvae were observed in the same pools. No other amphibians or reptiles were present at the time of collection, but *Ambystoma jeffersonianum, A. maculatum, Notophathalmus viridescens, Hemidactylium scutatum, Bufo americanus, Pseudacris crucifer, and Rana sylvatica* are also known breed in these and many other pools and bodies of water in the same area. The vernal pool was only about 5.5 feet [1.8 m] wide and 7 inches [18 cm] deep, with heavy deposits of leaves, bark, and other debris on the bottom. The surrounding wooded area was composed of deciduous and evergreen trees, near a medium-sized creek. The forest floor had a thick leaf litter and many decomposing logs. During a return visit on 7 February (air temperature 36 F [2 C]), we again observed *A. opacum* larvae in the same pool plus another much smaller pool (1 m wide and 5 inches [13 cm] deep). On this date a Common Snapping Turtle (*Chelydra serpentina*) was observed resting with its head pointing out of a small patch of ice over the pool. The *Ambystoma* larvae in both pools were about 2.1 to 2.3 cm in total length. The larvae collected in January readily fed on live black worms and frozen blood worms while being maintained in a 5 gallon aquarium at room temperature.

This is a new county record for *A. opacum* in Pulaski County (Tobey. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey. Virginia Herpetological Society, Purcellville, VA. 114 pp.; Mitchell and Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries, Special Publication No. 1, Richmond, VA. 122 pp.; Garriock and Reynolds. 2005. Results of a herpetofaunal survey of the Radford Army Ammunition Plant in southwestern Virginia. Banisteria 25: 3-22). Digital photos were submitted to the VHS archives (#83).

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***Eurycea longicauda longicauda* (Long-tailed Salamander).** VA: Fairfax Co., Great Falls, Riverbend Park. 12 May 2005. Jim Dewing, Marijke Gate, and John Callow.

On 12 May 2005 around 1300 h, park naturalist Jim Dewing found an adult Long-tailed Salamander under a log near the park's visitor center. A short while later, Jim showed JC the salamander and the location where he found it. Marijke Gate, another park naturalist, took digital photographs to document this discovery. A digital photo was submitted to the VHS archives (#82).

Tobey (1985. Virginia's Amphibians and Reptiles: A Distributional Survey. Virginia Herpetological Society, Purcellville, VA. 114 pp.) plotted several records for both the Long-tailed and Three-lined (*Eurycea guttolineata*) Salamanders in Fairfax County, noting that both species had been found along Scott Run, although not on the same date or in the exact same area of this stream. Primarily on the basis of a detailed, rangewide study by Carlin (1997. Genetic and morphological differentiation between *Eurycea longicauda longicauda* and *E. guttolineata* (Caudata: Plethodontidae). Herpetologica 53: 206-217), Mitchell and Reay (1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries, Special Publication No. 1, Richmond, VA. 122 pp.) subsequently restricted the range of *E. longicauda* in Virginia to the Blue Ridge and Ridge and Valley physiographic regions. However, Akre and Hansknecht (2003. Geographic Distribution: *Eurycea longicauda longicauda*. Herpetological Review 34: 379) recently documented a Long-tailed Salamander from The Nature Conservancy's Fraser Preserve in Fairfax County, noting that the specimen lacked a mid-dorsal line, either complete or broken, thus confirming its identity in accordance with the morphological criteria of Carlin (op. cit.). The specimen from Riverbend Park also lacked a mid-dorsal stripe and exhibited the orange ground color and vertical herringbone marks on the tail that are typical of this species. Riverbend Park is approximately 6 km SE of the Fraser Preserve; both properties border the Potomac River in northern Fairfax County. Scott Run ranges from about 7 km SE to 11 km S of Riverbend Park.

Ernst et al. (1997. The amphibians and reptiles of Ft. Belvoir and northern Virginia. Bulletin of the Maryland Herpetological Society 33: 1-62) reported that both *E. longicauda longicauda* and *E. guttolineata* occur in Fairfax and Prince William counties, noting that the latter "seems the more common in the region, especially along South Run near Burke Lake Park." We are also aware of several unpublished records of *E. longicauda longicauda* in Fairfax County, providing additional evidence that this species occurs in northern Virginia. Over several years in the early-mid 1980s, Steve Gotte (pers. comm.) found what he considered to be typical *E. longicauda longicauda* and *E. guttolineata* occurring syntopically at a site off Interpromontory Road in northern Fairfax County

(<1 km E of Fraser Preserve), once or twice observing both species on the same day under a firewood pile beside a seep. Gotte also informed us that both species formerly inhabited a small stream in a beech (*Fagus grandifolia*) forest on the George Mason University campus in Fairfax County, but that habitat has since been destroyed. Park naturalist Tony Bulmer (pers. comm.) reported that he found a Long-tailed Salamander in March 1998 in Hemlock Overlook Regional Park in southern Fairfax County.

The above records strongly suggest that the comparative distributions of *E. longicauda* and *E. guttolineata* in northern Virginia, particularly Fairfax, Loudoun, and Prince William counties, require further study of existing and new specimens, ideally including genetic analyses. The distributions of these species, especially *E. longicauda*, in this region do not appear to be accurately portrayed by the range maps in Mitchell and Reay (op. cit.). These authors remarked that unusual phenotypes of *E. guttolineata* and possible hybrids between the two species inhabit streams in Fairfax County. However, based on an analysis of purported intergrades and hybrids from localities in the southern portion of the range of these two species, Carlin (op. cit.) determined that there was no evidence for intergrades, hybrids, or a broad zone of sympatry or intergradation, and concluded that the species had mostly parapatric distributions with little or no sympatry. Current evidence suggests that northern Virginia is an area of sympatry, and possibly localized syntopy, of *E. longicauda* and *E. guttolineata*.

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Long-tailed Salamander (*Eurycea longicauda longicauda*) from Riverbend Park, Fairfax County, Virginia. Photo by Marijke Gate.

***Rana sylvatica* (Wood Frog).** VA: City of Danville, 2 km W Westover Hills, 36° 35.926' N, 79° 29.440' W (NAD 83). 13 February 2006. Mark Cramer and Jason Gibson.

The warm January and early February of 2006 led to many of the explosive late winter species breeding earlier this year. On 13 February 2006 MC discovered one Wood Frog egg mass in a road rut vernal pool. The pool measured 8.5 meters long by 5.8 meters wide and the greatest depth was 10 centimeters. Surrounding the pool on one side is a mature oak hickory forest which slopes down to an ephemeral runoff stream. The other side of the pool is surrounded by an early successional forested area from a recent disturbance. The dirt road containing the breeding pool is frequented by off-road vehicles. This observation represents a southeastern range extension of 28.5 km from a record of Wood Frogs in Mountain Valley, Henry County (Virginia Fish and Wildlife Information Service, VDGIF) and an eastern range extension of 31 km from a record in Chatmoss, Henry County (Schwaner and Anderson. 1991. Geographic Distribution: *Rana sylvatica*. Herpetological Review 22: 64). It also represents a new record for the City of Danville (Mitchell and Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries, Special Publication No. 1, Richmond Virginia. 122 pp.). A digital photo of the egg mass has been deposited in the VHS digital archives (#76). *Pseudacris feriarum* egg masses were also collected with the Wood Frog egg mass. Wood Frogs have an activity season in Virginia extending from late January (Hoffman. 1985. The herpetofauna of Alleghany County, Virginia Part 2. Class Amphibia. Catesbeiana 5: 3-13.) to late October (Tobey. 1986. Some amphibian and reptilian records from Loudoun Heights, Loudoun County, Virginia. Catesbeiana 6: 7-10). Published egg laying dates are from 12 February (Hunley. 2001. Field Notes: *Rana sylvatica* (Wood Frog). Catesbeiana 21: 34.) to 21 April (Mitchell and Buhlmannn. 1999. Amphibians and reptiles of the Shenandoah Valley Sinkhole Pond System in Virginia. Banisteria 13: 129-142). Our observation represents one of the earliest recorded egg-laying dates in Virginia. A piece of the Wood Frog egg mass and one Upland Chorus Frog egg mass were brought into JG's high school lab for observation. Upon hatching, tadpoles of both species consumed the Wood Frog egg mass jelly over the course of several days. One chorus frog tadpole became trapped in the Wood Frog egg mass jelly and died. My students and I were amazed to observe a Wood Frog tadpole begin to eat the dead chorus frog tadpole's tail. Wood Frogs are known to be omnivorous and scavengers of animal protein (Alford. Ecology: resource use, competition, and predation. Pp. 240-278 *In* McDiarmid and Altig (eds.). 1999. Tadpoles: The Biology of Anuran Larvae. The University of Chicago Press, Chicago. 444 pp.). The tadpole only removed a small portion of the dead tadpole and then went to another location in the tank to feed. A short time later, another Wood Frog tadpole began to feed on the tail of the dead tadpole. The chorus frog

tadpole fell to the bottom of the tank and was consumed in a matter of seconds by a feeding frenzy of Wood Frog tadpoles tadpole. The tadpoles schooled and fought for the remains. It was very reminiscent of watching a shark-feeding frenzy. The Wood Frog tadpoles also scavenged a dead *Ambystoma opacum* larva dropped into the tank.

To insure that the Wood Frog egg mass was correctly identified, tadpoles were raised at room temperature until metamorphosis. Metamorphs began to appear during the week of 10 April. The natal pool where the eggs were collected dried within days of their discovery. This early breeding season was followed by a dry period, resulting in complete mortality of the tadpoles in this pool.

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***Eumeces anthracinus anthracinus* (Northern Coal Skink).** VA: Montgomery Co., Falls Ridge Preserve (The Nature Conservancy), 5.0 km (3.2 miles) WSW Ironto on ridge between Falls Hollow and Fagg Hollow south of North Fork Roanoke River (37° 11' 33"N, 80° 19' 29"W). Elevation 475 m (1,560'). 10 July 2004. Steve Croy and Braden Croy.

While working on a road that accesses the former Bill Bradley house on the Preserve, my son Braden and I were digging shale from a cut-bank on the uphill side of the drive at the first hairpin curve when I unearthed a lizard at approximately 1440 h from amongst the surficial shale and clumps of Pennsylvania sedge (*Carex pennsylvanica).* I caught the lizard and identified it as a Coal Skink. Weather conditions were mostly clear with bright sun and building thunderstorms, air temperature was approximately 26-29° C (80-85° F) and very humid. The skink was photographed and released. No additional Coal Skinks were observed at the capture site, but two Five-lined Skinks (*Eumeces fasciatus*) and a Northern Fence Lizard (*Sceloporus undulatus hyacinthinus*) were also observed in the same general area during the afternoon.

The capture site is on a south to southwest facing cutbank consisting of shale outcrops and loose broken shale sctee, beside a gravelled road. Surrounding vegetation can be characterized as a mixed oak-pine woodland. Plant species at this site included blueberry (*Vaccinium vaccilins.*), dwarf cinquefoil (*Potentilla canadensis)*, shale barren pussytoes (*Antennaria virginica).*, mountain laurel (*Kalmia latifolia*), maple-leaf viburnum (*Viburnium acerifolia*), white pine (*Pinus strobus*), red maple (*Acer rubrum*), black gum (*Nyssa biflora)*, pitch pine

(*Pinus rigida*), table mountain pine (*Pinus pungens*), red oak (*Quercus rubra*), and rock chestnut oak (*Quercus montana*).

This is the second known record of Coal Skinks for Montgomery County. The first was documented by Mike Donahue in March 2003 on a ridge south of Craig Creek near Caldwell Fields (Donahue. 2005. Field Notes: *Eumeces anthracinus anthracinus*. Catesbeiana 25: 79-80). Digital images of the skink and habitat were submitted to the VHS archives (#80 and 80B).

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***Eumeces anthracinus anthracinus* (Northern Coal Skink).** VA: Alleghany Co., George Washington National Forest, 4.8 km south of Interstate 64 at Callaghan, 0.4 km west of SR 600 (41° 80' 38.2" N, 5° 81' 49.3" W). 12 January 2006. Mike W. Donahue and Fred C. Huber.

While participating in a training program, Fred Huber observed a Coal Skink basking along the edge of a wildlife opening. In an effort to evade capture, the skink quickly crawled under the leaf and grass litter and some small woody debris. However, with group effort, we captured the skink at 1330 h. It was a clear, sunny day and the air temperature was approximately 20-21° C, an unseasonably warm day for January. The skink was not photographed in the field, but was captured and taken to the James River Ranger District to be weighed and measured (122 mm total length, SVL 57 mm, 4.0 g). The following day, Ed Haverlack, James River Ranger District Biologist, photographed and released the skink at the capture site. No additional Coal Skinks were observed at the capture site on either date. The site included a grassy road through mixed oak-pine woodland, a nearby powerline right-of-way, and several grassy openings. Site elevation is approximately 500 meters, with a south to southwest aspect. Plant species at this site included blueberry (*Vaccinium* sp.), *Potentilla* sp., *Antennaria* sp., white pine (*Pinus strobus*), Virginia pine (*Pinus virginiana*), red maple (*Acer rubrum*), black gum (*Nyssa biflora*), and chestnut oak (*Quercus prinus*).

This account and other recent reports (Croy. 2006. Field Notes: *Eumeces anthracinus anthracinus*. Catesbeiana 26: 22-23; Donahue. 2005. Field Notes: *Eumeces anthracinus anthracinus*. Catesbeiana 25: 79-80; Lapradd et al. 2004. Field Notes: *Eumeces anthracinus anthracinus*. Catesbeiana 24: 70; Roble et al. 1998. Field Notes: *Eumeces anthracinus anthracinus*. Catesbeiana 18: 49-52)

continue to define the distribution and add to the biology of the Coal Skink in the state. This observation is one month earlier than the previously documented early date (Roble et al., op. cit.) for Coal Skinks in Virginia and confirms that this species can be located year round if temperatures are appropriate. Digital images of the skink were submitted to the VHS archives (#79 and 79B).

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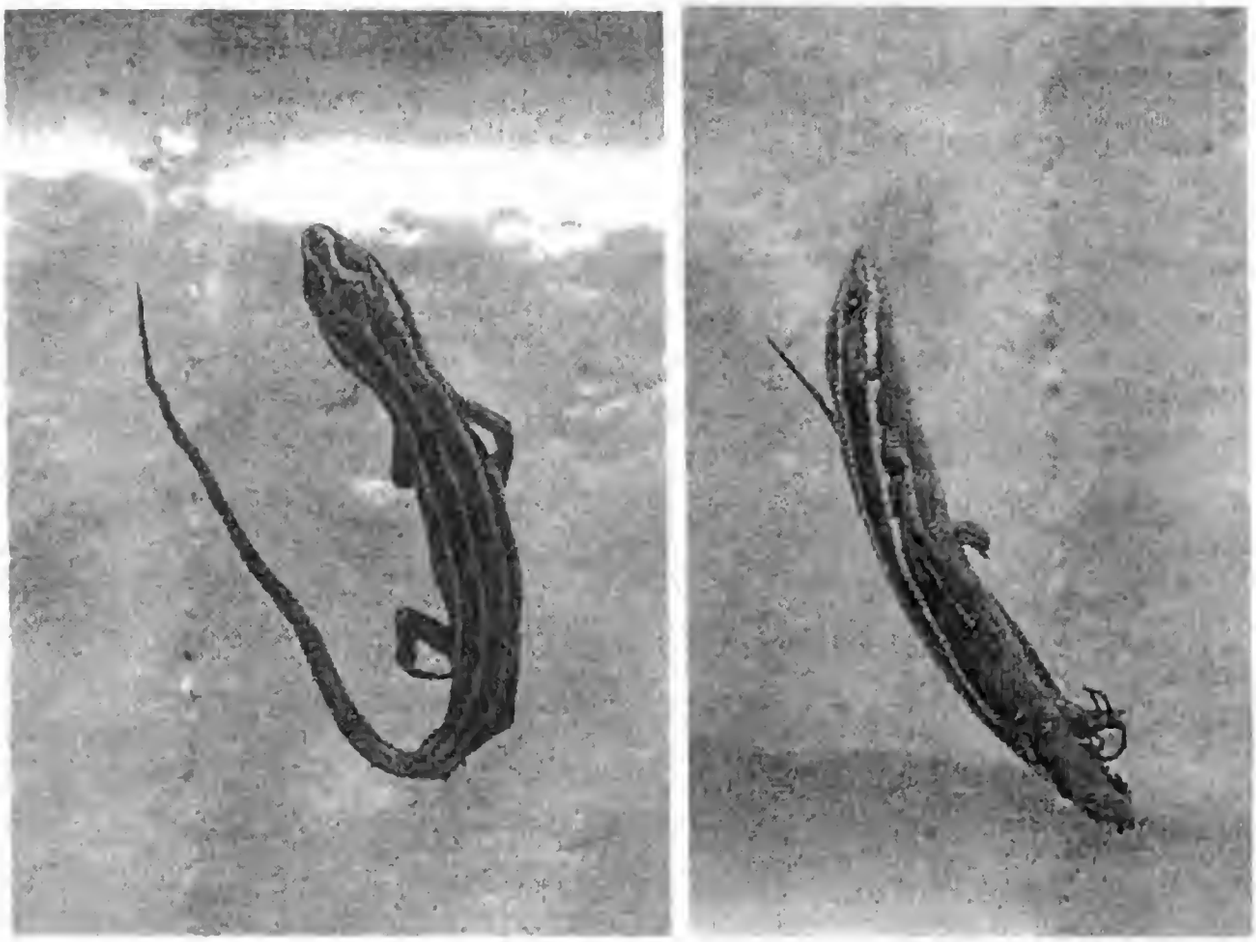
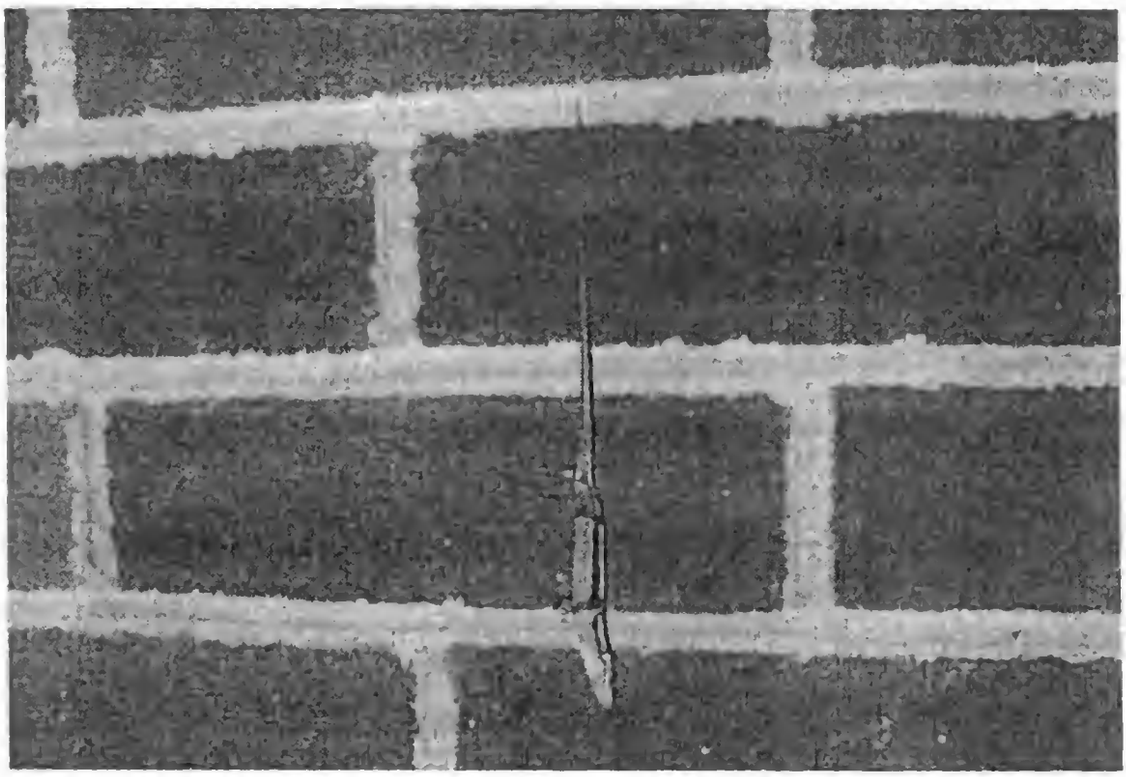
***Eumeces fasciatus* (Five-lined Skink).** VA: Powhatan Co., 2 km N of Holly Hills, 37° 31.156' N, 77° 44.572' W. 25 July 2005. C. C. Wirth; VA: Pittsylvania Co., 2.1 km NNW of Mount Hermon, 36° 41.524' N, 79° 25.544' W (NAD 83). August 2005. J. D. Gibson.

Observations of potential mortality events are rarely observed and reported in the literature. These events are typically not witnessed, overlooked, or occur so rapidly that few records are published. The lives of juvenile creatures are full of perils, including finding sufficient food and water, surviving predation events, and surviving random accidents which can cause mortality. Herein we report two events in which juvenile Five-lined Skinks (*Eumeces fasciatus*) became entrapped in spider webs. To our knowledge, only two observations of entrapped Five-lined Skinks appear in the literature. One occurred in North Carolina and involved a male *Achaearanea* spider (Welter and Fauth. 1996. Natural History Notes: *Eumeces fasciatus* (Five-lined Skink). Entrapment. Herpetological Review 27: 70). The Virginia observation involved a female American house spider (*Achaearanea tepidariorum*) (Gibson. 2005. Field Notes: *Eumeces fasciatus* (Five-lined Skink). Catesbeiana 25: 35-36).

On 25 July 2005 at 1353 h, CW observed a juvenile Five-lined Skink entrapped in a spider web which was constructed on the side of a residential house. Lizards had been seen basking at this sunny location on previous occasions. The lizard was probably sunning itself and became entangled in the web while running across the wall. It was firmly stuck in the web and only sporadic twitching was observed. The web was only partially destroyed and almost all of the web anchor points were intact. The spider was located in an intact corner of the web. The spider was an unidentified species of orbweaver (family Araneidae). No photos or voucher specimens were collected of the spider, but a photo of the skink caught in the web has been deposited in the VHS archives (digital photo # 78). The lizard was retrieved from the web and sticky silk was removed. Upon release, it slowly walked away.



Dorsal and lateral views of juvenile *Eumeces fasciatus* captured in web of an orbweaver spider. Photographed in Powhatan County, Virginia by Christopher Wirth.



Juvenile *Eumeces fasciatus* captured in web of an American house spider (*Achaearanea tepidariorum*). Photographed in Pittsylvania County, Virginia by Jason Gibson.

In early August 2005, JG found a juvenile Five-linked Skink hanging by its tail from the eaves of a residential house. The webbing material was made by the American house spider (*Achaearanea tepidariorum*). The lizard was observed dangling all day and through a portion of the night. The next morning the animal was no longer attached to the web and was not found dead below the capture point. During the observed time, the lizard made forceful undulating motions of its body, trying to escape. It is surprising that the tail did not detach and allow the lizard to fall to the ground and escape. Perhaps the lizard's continued movement weakened the web to the point of release and the animal walked away after it fell to the ground. A digital photo of this observation has been deposited in the VHS archives (photo # 77).

Gibson (op. cit.) thought that events like these were rare, but the number of observations is beginning to increase. As the number of houses increases around the state, these events are more likely to occur. Whether or not spiders in Virginia prey on juvenile lizards, and, if they do, if this represents a significant source of mortality, remain unknown. More field observations and studies on the juvenile life stage of the Five-lined Skink are needed to answer these questions.

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Opheodrys aestivus **(Rough Greensnake)**. VA: Charles City Co., 1.2 km SE jct. US Rt. 5 and VA Rt. 155 (Kimages Hill), Virginia Commonwealth University's Rice Center (37° 20' 12.51" N, 77° 12' 33.31" W). 29 October 2005. Joseph C. Mitchell and Susan C. Walls.

Limits of seasonal activity periods in ectothermic vertebrates in terrestrial habitats are strongly affected by local environmental temperatures, aspect, slope, geographic variation in climate and weather patterns, and microhabitat (Gibbons, and Semlitsch. 1987. Activity patterns. Pp. 296-421 *In* R.A. Seigel et al. (eds.), Snakes, Ecology and Evolutionary Biology. MacMillan Publishing Co., New York, NY). Mitchell (1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington, DC. 352 pp.) reported dates of early and late activity for all species of snakes in Virginia. Most were based on dates of collection for museum specimens. The accuracy of such dates is limited by the available information and does not necessarily reflect actual emergence and ingress times, nor the geographic variation in such dates. It is thus of interest to record all early and late dates of activity, the locality, and associated environmental data to provide

information for a regionally-focused database. This note describes our observation of a late terrestrial activity date for *Opheodrys aestivus* in the Coastal Plain of Virginia.

At 1325 EDT on 29 October 2005, we observed an adult female *O. aestivus* (423 mm SVL, 261 mm tail length) lying in the open stretched across a dirt/gravel road under full canopy and shade. The habitat was primarily mixed oaks (*Quercus* spp.) with scattered mature pine. Air temperature was 13.9° C and substrate temperature was 12.5° C; the weather was partly cloudy. The snake was cold to the touch; her movements and tongue flicking were slow when picked up. We observed no other active reptiles that day.

Times of early and late activity of geographically widespread snakes such as *O. aestivus* are likely to vary considerably. This species occurs on the Barrier Islands of Virginia westward through the Coastal Plain, Piedmont, Blue Ridge Mountains, and into the Appalachian Mountains (Mitchell and Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries, Special Publication No. 1, Richmond, VA. 122 pp.). Coastal populations should have a longer seasonal activity period than populations in the mountains. Elucidating an accurate geographic pattern for Rough Greensnakes will take many more observations than the one reported here. Our observation establishes the latest seasonal activity date known for *O. aestivus* in Virginia Coastal Plain (Mitchell, *op. cit.*). The latest date of presumed activity of *O. aestivus* in Virginia based on museum specimen records was 28 October (Mitchell, *op. cit.*). Temperatures became warmer (16-21° C) in this region for several days following our visit to the Rice Center, suggesting that the actual end of Rough Greensnake activity in the Coastal Plain may have been at least early November 2005.

We thank Dr. Leonard Smock of VCU for permission to visit the Rice Center. This is Rice Center Contribution Number 003.

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President's Corner

Thank you for allowing me to serve a term as president of the VHS. I take this position surrounded by a great group of officers and friends. Over the past 10 years I have derived great pleasure from participating in VHS field trips and annual fall symposia. I have made life-long friends and have traveled all over the state finding unique and beautiful reptiles and amphibians. It is my hope that old and new members will rekindle or experience what I have over my decade as a member in the VHS. To help facilitate positive experiences and memories, the VHS officers have been very hard preparing three surveys for members to come and participate in for 2006. Please see the announcement in this issue of *Catesbeiana* for information about how you can participate (any updates will appear on the VHS website). This year we are starting a new survey called Herp Blitz. This survey is like a regular spring survey but without a formal business meeting. This year's first annual Herp Blitz will take place at Fairystone State Park. The VHS is also continuing to participate in the annual Virginia BioBlitz. This year the Virginia BioBlitz (the Potomac BioBlitz) will take place in northern Virginia and southern Maryland. Finally, this year the annual VHS survey will be held at Douthat State Park and Warm Springs Mountain Preserve. Not only can you come to three surveys, you can conduct some of your own. The VHS has initiated two new herp counting programs (herpetofaunal counts and Spotted Salamander egg mass counts) that we hope members will be interested in conducting. Both of these herp counts were advertised in the last newsletter and are described on the VHS website. Already, two members have submitted counts for this year. Data that is submitted will be printed in the VHS newsletter. We hope to see you at the spring field trips, but if you can't come then please conduct a survey of your own. Either way, get out into the field.

There are also many ways in which you can become involved with the VHS besides the field trips. Kory Steele (newsletter editor) has started a VHS yahoo group website (http://groups.yahoo.com/group/VaHS/join). This is a great way to hook up with people and go herping and to ask questions or answer questions for people. Joy Ware jlware@vcu.edu (research committee chair) is conducting a snake lesion survey and would love for people to volunteer to help catch snakes. The VHS has many committees that need your help. The committees include education (Mike Hayslett, chair), research, membership (Tyler Cassidy and Mark Crammer, co-chairs), the VHS newsletter, and the website (John White, webmaster). The *Catesbeiana* editor (Steve Roble) is always looking for field notes, artwork, photos, and articles to include in each spring and fall issue. We also have a fall symposium which only continues if members help conduct the educational workshop and make presentations of original research. Please get involved. Contact any of the committee chairs or officers to ask how you can help. I look forward to meeting each of you and working for the growth and betterment of the Virginia Herpetological Society over the next two years. Please

allow me to know how I can better serve you. I would like to conclude by thanking the former president Mike Clifford and vice president Kory Steele. They both did a great job. I also want to thank Susan Watson, Paul Sattler, Steve Roble, John White, Mike Hayslett, Joy Ware, Mark Crammer, Tyler Cassidy, and Kory Steele for serving as officers and committee chairs.

Respectively submitted
Jason Gibson, VHS President

Virginia Herpetological Society
Minutes of the Fall 2005 Meeting
Liberty University, Lynchburg, Virginia
October 29, 2005

The meeting was opened by Mike Clifford at 1:07 pm with about 20 persons in attendance. The President welcomed everyone to the Fall 2005 Meeting and introduced the members of the Executive Council.

Mike Clifford, as outgoing President and chair of the nomination committee, presented a slate of officers for election. Jason Gibson was nominated for President. It was moved, seconded, and passed to accept Jason as President by vote of acclimation. Susan Watson and Carol Pollio were nominated for the office of Vice-President. A vote elected Susan Watson. Paul Sattler was nominated for Secretary/Treasurer. It was moved, seconded, and passed to accept Paul as Secretary/Treasurer by vote of acclimation. Mike Clifford suggested to the new President, Jason Gibson, that he consider the establishment of two new committees to parallel the Education Committee, those of Research and Conservation, and that he consider appointing Carol Pollio as chair of one of these since she was interested in serving the VHS to a greater extent. There are three goals in the VHS charter, those of Education, Conservation and Research, yet there is a standing committee for only one. It was suggested that the VHS Grants in Herpetology might be assigned to the Research Committee.

The Secretary/Treasurer reported that the Spring 2005 minutes and Treasurers Report from October 2005 were printed in *Catesbeiana* 25(2). Steve Roble, the editor of *Catesbeiana*, stated that there were some contribution problems with volume 25(2). The Spring 2006 issue should have several articles ready. Members were reminded that Field Note contributions are due by March first and September first of each year. In discussing where members could go to see if their finds were new records, Steve mentioned that several new records for Virginia have been published in *Herpetological Review*. He may prepare a list of

these to publish in *Catesbeiana* for member's convenience. There was a discussion on the future format and appearance of the journal, with suggestions that a glossy paper and better illustrations might be in order. There was discussion of the merits of purchasing a copy of Page Maker to organize the printing. It was mentioned that a slicker appearance for *Catesbeiana* would mean that a longer lead time would be required between submission of the final copy and printing and mailing of the finished product. This might necessitate a single issue each year. It was decided that further discussion would be required and that if a Research Committee was established it might contribute to some of these decisions.

The Newsletter Report went standing as the editor had recently resigned due to a move to the West Coast. Since there was a vacancy in the office, and Kory Steele was willing to fill that position, Jason Gibson as incoming President appointed him to that post. Kory had no Newsletter Report prepared to give. Webmaster John White reported that there were recent additions to the VHS Web Page. The Lizard ID key was up and the Turtle key would be next. Mike Hayslett, Education Committee chair, asked if the Snake Guide for Virginia species was still available. It is available free at local Virginia DGIF offices and available from the Richmond office at $3 per copy. The Atlas is still available and may be subject to an update in the near future. It was reported that some copies of the literature from the Teacher's Workshop were still available and were being offered to members present. It was reported that a new group, the Virginia Society of Naturalists, had recently been formed and was meeting monthly at the Science Museum of Virginia in Richmond. A list of nature centers and environmental education centers was distributed. A new publication, An Introduction to Mid-Atlantic Seasonal Pools is available free from the EPA if requested from the following address (U.S. Environmental Protection Agency, Mid-Atlantic Integrated Assessment, 701 Mapes Road, Fort Meade, MD 20755-5350). A request to support the 4-H Herp Camp by supplying instructors next summer, was made to all present. Contact Mike Hayslett if willing to help. The low attendance at the Teacher's Workshop was discussed, with the suggestion that a wider audience be targeted. That more than just classroom teachers were interested in the information provided was supported by the regular attendance of many VHS members at recent Workshops. The suggestion was made that area colleges be notified so that student teachers and others could be recruited. It was requested that those making presentations consider donating an electronic copy of their presentations to the Education Committee to help those in the future making similar presentations. Copyright considerations were discussed with the suggestion that contributors try to use VHS photos and general domain materials in preparing these presentations.

Fall Meeting Minutes

A new policy for the VHS Grants in Herpetology has been approved by the Executive Committee and was published in *Catesbeiana* 25(2). There was discussion as to the site for the Spring 2006 survey. The Nature Conservancy's Warm Springs Mountain Preserve in Bath county was presented. There are 9,000 acres and a variety of habitats. The aquatic habitats may be limited, however. Douthat State Park is nearby and might be used for housing and meeting facilities. It was suggested that other nearby sites could perhaps also be included, with teams being sent to multiple sites. A Boy Scout Camp in Rockbridge County and Fairystone State Park were also mentioned as possibilities. Jason Gibson stated that one of his goals as President would be to initiate multiple surveys since one-time surveys were quite insufficient at determining all of the species present, since breeding times were very different among different herp groups. Jason asked members what dates to avoid in planning surveys and was given the June 23rd Bioblitz and May 13th Liberty University graduation dates. It was suggested that it would be very convenient to have a long-term schedule of where the Spring survey would occur, planned out for several years. It was also suggested that it would be good to have an idea of what counties or areas were underrepresented in the atlas and other databases. A final decision was left to the future.

The meeting was dismissed at 2:22 pm with a brief recess before the paper session was to begin. Papers presented included:

"Herpetological Surveys in Virginia: An examination of the VHS Bulletins and *Catesbeiana*" by Jason Gibson and Tyler Cassidy.

"The Peaks of Otter Salamander in the contact zone with the Redback Salamander" by Andrew Kniowski and Norm Reichenbach.

"Population model for the Timber Rattlesnake in the Blue Ridge Mountains" by Josh Zealand, James Kirshberger, Jeff Mason, and Norm Reichenbach.

"A survey of external lesions in snakes of the Rappahannock River Wildlife Refuge: an on-going study" by Joy Ware and Kory Steele.

Respectively submitted
Paul Sattler, VHS Secretary/Treasurer

Virginia Herpetological Society
Treasurer's Report
April 2006

Balance on Hand October 2005	$6342.26
Receipts:	
October Dues	$218.00
November Dues	$ 88.00
December Dues	$ 93.00
January Dues	$524.00
February Dues	$183.00
March Dues	$253.00
April Dues	$ 63.00
Fall Silent Auction	$ 79.50
Sale VA Endangered Species	$ 9.00
Fall Teacher's Workshop	$ 30.00
Total Receipts	$1,539.50
Disbursements:	
Catesbeiana 25(2)	$408.47
Stamps	$ 14.80
BioBlitz 2006 Donation	$300.00
Collecting Permit Fee	$ 40.00
VHS Banner	$153.42
Promotional VHS Pens	$444.04
Newsletter Postage	$ 18.08
VHS Grant in Herpetology	$500.00
Wachovia Service Fee	$ 6.00
Douthat Shelter Reservation	$ 47.25
Rite on Rain Paper	$ 35.95
Total Disbursements	$1,958.21
Balance on Hand April 2006	**$5,923.55**

Paul Sattler
VHS Secretary/Treasurer

VHS 2006 Herp Surveys Announcement

Dates have been set for three herp survey events this spring and summer. We encourage you to pre-register for these surveys with Jason Gibson (frogman31@gmail.com) or Susan Watson (Susan.Watson@ dgif.virginia.gov) if you plan to attend. Up-to-date information and meeting locations will be posted on the VHS website (http://fwie.fw.vt.edu/VHS/).

Herp Blitz (First Annual) May 19-21, 2006

Come out and join us for the first annual Herp Blitz. VHS members have been requesting an additional survey each year so Herp Blitz has been organized to satisfy this need for herping. Herp Blitz is like the annual survey but without a formal meeting. The first Herp Blitz will take place in Patrick and Franklin Counties at Fairystone State Park (http://www.dcr.state.va.us/parks/fairyst.htm#Location) and Fairystone Farms Wildlife Management Area (http://www.dgif.state.va.us/hunting/wma/fairystone_farms.html). Saturday will be the main collecting day with Friday used for setting up turtle traps, preliminary organization, calling anuran surveys, and road cruising, and Sunday will be a half-day survey used to collect turtle traps and survey any additional areas. Be sure to bring your digital camera and GPS unit. Driving directions, maps, and camping/lodging information can be found online following the above links. Upon entering the state park you will need to acquire a free parking pass. For free parking on May 19th each participant must stop in the park office and tell the attendant that you are participating in the survey. For free parking on May 20th and 21st each participant must stop and tell the attendant at the contact station (small building in the middle of the road at the park entrance staffed from 9:30 am to 6:00 pm) that you are participating in the herp survey. You will receive a cash register receipt showing "0" to put on you dashboard.

Schedule

Friday May 19

4:00 PM — Meet in grassy parking area at Fayerdale Conference Center (Fairystone State Park). We will meet and discuss survey areas, set turtle and minnow traps, discuss calling anuran surveys and road cruising.

Saturday May 20

8:30 AM — Meet in grassy parking area at Fayerdale Conference Center (Fairystone State Park). Organize into survey groups and travel to designated survey locations.

Saturday May 20 (continued)

12:30 PM	Regroup at Fayerdale Conference Center parking lot, eat lunch, and begin afternoon surveys.
5:00 PM	Meet back at Fayerdale Conderence Center to turn in survey reports and digital photos.
8:00 PM	Calling anuran surveys and road cruising (individually).

Sunday May 21

8:30 AM	Meet in grassy parking area at Fayerdale Conference Center. Break into survey groups and conduct surveys.
12:00 PM	Regroup at Fayerdale Conference Center parking lot, eat lunch, and turn in survey reports and digital photos.

Potomac Gorge BioBlitz June 23-25, 2006

The fourth annual Virginia BioBlitz will be held in northern Virginia at the Potomac Gorge. This year's BioBlitz is a joint venture between the National Park Service and The Nature Conservancy to document fungi, non-flowering plants, invertebrates, amphibians, and reptiles on NPS lands. Survey sites along the Potomac River in Virginia, Maryland, and the District of Columbia include Great Falls National Park, Turkey Run Park, and the Chesapeake & Ohio Canal National Historical Park. The VHS is sponsoring and leading the herp team.

The BioBlitz is an intensive 30-hour field survey that will begin at 9 AM on Saturday, June 24 and end at 3 PM on Sunday, June 25. The base camp for the event will be located in the heart of the Gorge at the historic Glen Echo Park in Glen Echo, Maryland. Survey teams will have the option to spend Friday and Saturday nights there. Meals (Friday dinner through Sunday lunch) will be provided to all participants. Pre-registration is required by no later than June 1, 2006. There is a limit to the number of people who can participate in this event. A schedule of events will be emailed to participants who pre-register. Please visit the 2006 BioBlitz website for more information (http://fwie.fw.vt.edu/vnhs/bioblitz.htm).

VHS Spring Meeting and Survey June 30-July 2, 2006

The annual VHS survey and spring business meeting will be held in Bath County on Warm Springs Mountain Preserve (The Nature Conservancy property) and Douthat State Park. The business meeting will begin at 6:00 PM on Friday, followed by a presentation at 7:00 PM about the Warm Springs Mountain Preserve and a discussion of survey teams and locations. The business meeting and presentation will be held at Shelter #1 (Camp Douthat Shelter). Each driver will need to stop at the park headquarters and request a free parking pass for the weekend. You will need to mention that you are with the Virginia Herpetological Society and are participating in the amphibian and reptile survey of the park. Be sure to bring your digital camera and GPS unit.

Schedule

Friday June 30

??	Set turtle traps and minnow traps (contact Jason Gibson at frogman31@gmail.com for a time to meet to set traps.)
6:00 PM	Meet at Shelter #1 (Camp Douthat Shelter) for business meeting.
7:00 PM	Presentation about Warm Springs Mountain Preserve and discussion of survey teams and locations.
8:00 PM	Calling anuran surveys and road cruising (individually).

Saturday July 1

8:30 AM	Meet at Camp Douthat picnic area (0.4 miles past park headquarters). Organize into survey groups and conduct surveys.
12:30 PM	Regroup at Camp Douthat picnic area, eat lunch, and begin afternoon surveys.
5:00 PM	Meet back at Camp Douthat picnic area to turn in survey reports and digital photos.
8:00 PM	Calling anuran surveys and road cruising (individually).

Sunday July 2

8:30 AM	Meet at Camp Douthat picnic area. Break into survey groups and conduct surveys.
12:00 PM	Regroup at Camp Douthat picnic area, eat lunch, and turn in survey reports and digital photos.

MEMBERSHIP APPLICATION

I wish to _____ initiate _____ renew membership in the Virginia Herpetological Society for the year _____ 2006 _____ 2007 _____ 2008.

Name _____

Address _____

_____

_____ Phone _____

email address: _____

Dues Category: ____ Regular ($15.00)
____ Family ($20.00)
____ Under 18 ($8.00)
____ Life ($225.00)

Interests: ____ Amphibians ____ Reptiles
____ Distribution ____ Research
____Captive Husbandry
___ Specifically _____

Make checks payable to the Virginia Herpetological Society and send to: Dr. Paul Sattler, VHS Secretary/Treasurer, Department of Biology, Liberty University, 1971 University Blvd., Lynchburg, VA 24502

Visit the VHS web site at: http://fwie.fw.vt.edu/VHS/

Field Notes

The field notes section of *Catesbeiana* provides a means for publishing natural history information on Virginia's amphibians and reptiles that does not lend itself to full-length articles. Observations on geographic distribution, ecology, reproduction, phenology, behavior, and other topics are welcomed. Field Notes will usually concern a single species. The format of the reports is: scientific name (followed by common name in parentheses), state abbreviation (VA), county and location, date(s) of observation, observer(s), data, and observations. The name(s) and address(es) of the author(s) should appear one line below the report. Consult the editor if your information does not readily fit this format. **All field notes must include a brief statement explaining the significance of the record** (e.g., new county record) **or observation** (e.g., unusual or rarely observed behavior, extremely early or late seasonal record, abnormal coloration, etc.). Submissions that fail to include this information are subject to rejection. Relevant literature should be cited in the body of the text (see Field Notes in this issue for proper format). All submissions will be reviewed by the editor (and one other person if deemed necessary) and revised as needed pending consultation with the author(s).

If the field note contains information on a **new county (or state) record, verification is required in the form of a voucher specimen** deposited in a permanent museum (e.g., Virginia Museum of Natural History) or a **photograph** (print, slide, or digital image) **or recording** (cassette tape or digital recording of anuran calls) deposited in the archives of the Virginia Herpetological Society. Photographs and recordings should be sent to the editor for verification and archiving purposes; the identity of voucher specimens must be confirmed by a museum curator or other qualified person. Include the specimen number if it has been catalogued. Prospective authors of distribution reports should consult Mitchell and Reay (1999. *Atlas of Amphibians and Reptiles in Virginia*), Mitchell (1994. *The Reptiles of Virginia*), and Tobey (1985. *Virginia's Amphibians and Reptiles: A Distributional Survey*) [**both atlases are available on-line on the VHS website**] as well as other recent literature to determine if they may have a new county record. New distribution records from large cities that formerly constituted counties (Chesapeake, Hampton, Newport News, Suffolk, and Virginia Beach) are acceptable, but records from smaller cities located within the boundaries of an adjoining county will only be published if the species has not been recorded from that county. Species identification for observational records (e.g., behavior) should be verified by a second person whenever possible.

PHOTOGRAPHS

High contrast photographs (prints, slides, or digital images) of amphibians and reptiles will be considered for publication if they are of good quality and are relevant to an accompanying article or field note. Prints should be on glossy paper and no larger than 5 x 7 inches. Published photographs will be deposited in the archives of the Virginia Herpetological Society.